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Preferred provider organizations: hospital participation in the San Francisco Bay Area

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PREFERRED PROVIDER ORGANIZATIONS:
HOSPITAL PARTICIPATION IN THE SAN FRANCISCO BAY AREA

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by

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ABSTRACT

PREFERRED PROVIDER ORGANIZATIONS:
HOSPITAL PARTICIPATION IN THE SAN FRANCISCO BAY AREA

by William Barry Graham

This thesis addresses the relationship between hospitals and preferred provider organizations (PPO) in the San Francisco Bay Area. The generic PPO is an organization that is designed to control medical costs while assuring the delivery of quality health care services. Oliver Williamson's theories of transaction cost economics serve as the theoretical framework for this thesis. The study hypothesized that hospitals, as a result of their participation with PPOs, developed and experienced changes to bureaucratic and transaction organizational control mechanisms. These mechanisms are germane to the hospital participation with PPOs in that they provide protection from "hazards" associated with complex exchange relationships. A survey was administered to fourteen hospitals in the San Francisco Bay Area, wherein the data described the development of and changes to PPO specific bureaucratic and transaction organizational control mechanisms.

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Chapter I

Introduction

In the early 1980s, as health care costs in the United States continued to rise uncontrollably and health care policy makers, providers, and payers sought creative mechanisms to combat these increases, the State of California implemented legislation designed to encourage price competition among providers of medical care and specifically, among hospitals (Johns, 1988). Laying a foundation for the development of preferred provider organizations (PPO) and a vast restructuring of the managed care market place, California Assembly Bill 3480 was enacted in 1982 and has allowed providers and private third-party payers of health care services to enter into selective contracting arrangements without significant threat from federal antitrust litigation (Johns, 1988). Such arrangements are characterized by contractual agreements between providers and third-party payers where providers agree to accept discounted fee-for-service reimbursement, and payers agree to direct or channel patients to contracted providers (i.e., preferred providers) and away from non-contracted providers (Palmer, 1985). Established under these guidelines, PPOs have enjoyed considerable growth and attention since their introduction in 1983 (American Managed Care and Review Association, 1990; Johns, 1989). This study was designed to explore the organizational relationship between hospitals and PPOs in the San Francisco Bay Area.[1]

Significance of the Problem

In the State of California, a number of interrelated factors influenced the implementation of selective contracting between providers and payers of health care services. Prompted by a loss of funds resulting from Proposition 13, the California Medicaid structure (Medi-Cal), with approval from the federal Health Care Financing Administration (HCFA), was modified in 1982, allowing State government the authority to

develop selectively contracted relationships with hospitals. Similarly, in the same year, responding to mounting pressure from a private industry sector suffering from hyperinflationary employee health benefit costs amid economic recession and high unemployment, the California State Assembly passed assembly bill 3480 allowing private third-party payers to participate in selective provider contracting (Johns, 1988).

Analysis of California health care costs prior to selective contracting indicated that as a hospital's environment became more competitive, subsequent cost increases occurred (Robinson & Luft, 1987). Such increases were attributed to "non-price" competition, or more specifically, hospital spending in order to compete on the grounds of high technology and quality, and were consistent with increases reported in national studies where "non-price" competition among health care providers was analyzed (Joskow, 1980; Luft, Robinson, Garnick, Maerki, & McPhee, 1986; Robinson & Luft, 1985; Robinson & Luft, 1987; Wilson & Jadlow, 1982). Studies following the introduction of selective contracting, however, reported a decrease in the rate of overall cost increase experienced by California's hospitals and suggested that this decrease was greatest in competitive markets (Melnick & Zwanziger, 1988; Robinson & Luft, 1988). Likewise, investigators reported a decrease in hospital net revenues (adjusted for inflation) after the implementation of selective contracting and an increase, from 19.4 percent in 1980-1982 to 35.3 percent in 1986-1987, in the discounts offered by hospitals to third-party payers (Melnick, Zwanziger, & Bradley, 1989).

Findings such as these suggested that California hospitals faced significant challenges as a result of selective contracting. Among them was participation with PPOs. Johns (1989) reported that the number of PPOs in California grew from 37 in 1984 to 72 in 1988, and a subsequent report by the American Managed Care and Review Association (1990) indicated that 119 California PPOs were operational in 1990.[2] Johns (1989) also reported

that the State's potential PPO enrollment was 430,000 in 1984 and 16,790,000 in 1988.[3] Although Johns (1989) argued that figures associated with the number of potential enrollees were exaggerated as a result of self-reporting by PPOs, the substantial increase of such enrollees, and the increased number of California PPOs, suggested a heightened demand that hospitals participate with PPOs. Health policy investigators, however, have given little attention to the hospital/PPO relationship and its organizational governance.[4]

Thesis Objectives

Recognizing the increasing demand that hospitals participate with PPOs, the primary objectives of this study were (a) to explore the hospital/PPO relationship and the ways in which this relationship was governed by hospitals (b) to introduce and discuss the transaction cost economic theories of Oliver Williamson (1985, 1991) with respect to governance of the hospital/PPO relationship, and (c) to discuss the study results as they pertain to the development and evaluation of models which describe hospital participation with PPOs.

Organization of the Thesis

The study consists of five chapters. Chapters One and Two are theoretical and intended to (a) introduce and provide insight to the hospital/PPO relationship, (b) discuss a conceptual model of hospital participation with PPOs, (c) present the study's theoretical framework, (d) introduce the study's research aims and hypotheses, and (e) review the relevant literature. Chapter Three is a discussion of the study design with respect to the chosen data source, methodology, and survey instrument. Findings of the investigation are presented and discussed in Chapter Four, and concluding remarks are provided in Chapter Five. A reference list, appendices, and footnotes follow Chapter Five.

Chapter II

Conceptual Model of Hospital Participation with PPOs

The identification of a conceptual model depicting PPOs has been characterized by the adage, "If you've seen one PPO, you've seen one PPO" (de Lissovoy, Rice, Ermann, & Gabel, 1986).[5] However, due to consistent goals among PPOs, de Lissovoy et al. have argued the long term accuracy of this statement and attribute PPO dissimilarity to the model's versatility in adapting to and balancing diverse market and political conditions. Similarly, Boland (1985) has suggested that inconsistency among PPOs is due to variation in the conditions responsible for their evolution, and he has identified these as (a) competition among health care providers, (b) high employee health benefit costs, and (c) state legislation supporting selective contracting. Boland (1988) has also suggested that while PPOs share definitive characteristics, the amalgamation of such characteristics reflects the unique goals and objectives of PPO participants.[6]

Gabel, Ermann, Rice, and de Lissovoy (1986) have defined PPOs as facilitators of contractual arrangements between medical care providers and third-party payers, where providers accept, for pre-defined groups of patients, discounted fee-for-service reimbursement and PPO conducted utilization review. In this definition, beneficiaries of third-party payers retain the right to utilize providers outside the PPO, but are encouraged, via economic incentives, to utilize contracted providers. Gabel et al. have defined economic incentives as mechanisms whereby third-party payers expand covered benefits or reduce cost-sharing for beneficiaries that use PPO providers.

Gabel et al. (1986) have argued that the PPO model distinguishes itself from other fee-for-service discount delivery systems in that PPOs, rather than contracting with all providers, attempt to contract selectively with cost-effective providers. They have suggested, further, that the PPO model is designed to achieve cost savings by leveraging

providers to negotiate competitive pricing and by requiring providers to participate in PPO sponsored utilization review. Gabel et al. have reported that PPOs, in exchange for provider concessions, promise potentially increased patient pools and accelerated claims payment.

Palmer (1985) has reported that the primary goal of hospital participation with PPOs is the generation of patient base, and she has argued that a hospital's success with PPOs is in part measured by its ability either to attract a larger percentage of patients from existing service areas, or to expand into new service areas from which patients can be drawn. Palmer has warned, however, that the acquisition of PPO patients should not supersede the hospital's need to attract revenue generating utilization and that this need potentially conflicts with that of PPOs, which is to reduce costs per insured beneficiary through discounted remuneration to the hospital, decreased lengths of inpatient stays, and greater utilization of outpatient service options.

Palmer (1985) has also reported that hospital participation with PPOs is based on the assumption that PPOs effectively channel patients to providers in order to offset the negotiated economic concessions. Palmer has argued, further, that an individual hospital's PPO participation analysis should consider three variables which she identifies as (a) the projection of financial impact on the hospital with respect to PPO participation and non-participation, (b) the ability of channeling mechanisms proposed by the PPO to shift patients from competitors, and (c) the projected changes to patient hospitalization resulting from PPO sponsored utilization review. Integrated, Palmer has suggested that these variables offered a simple model for assessing hospital participation with PPOs.

Palmer's (1985) model, however, is limited in that it assumes the unimpeded organizational adaptability of hospitals to changes in their economic environment. This study does not ascribe to this assumption and suggests, therefore, that further theoretical

and empirical analysis is necessary in order to broaden the scope of understanding concerning the ways in which hospitals participate with PPOs.

Theoretical Framework

Oliver Williamson's (1985) transaction cost economics serves as the theoretical framework for this investigation of the hospital/PPO relationship. His work is particularly attractive because it brings together concerns of behavioral science, contract law, and institutional economics. Transaction cost economics is a microanalytical approach to the study of economic organization in which transactions are the primary unit of analysis. Williamson (1985) posits that firms may be viewed not as production functions economizing production costs, but as governance structures designed to economize transaction costs.[7] Williamson explains that governance structures are the institutional framework within which transactional integrity is maintained and that the development of such structures is a function of certain conditions of the transaction. Presented in greater detail with definitions below, these conditions include: (a) the behavioral assumptions of bounded rationality and opportunism; (b) the transactional conditions of asset specificity, frequency of occurrence, and uncertainty; and (c) the manner through which transactions are enforced. These conditions are then considered with respect to their role in economic organization and contractual governance.

Behavioral assumptions. Williamson (1985) presents bounded rationality and opportunism as the primary behavioral concerns of human exchange. Respectively, these represent the degree to which economic agents are cognitively competent and to which they are self-interest seeking. Whereas neoclassical economics assumes that participants of economic organization are completely rational, transaction cost economics maintains that participants are "intendedly rational, but only limitedly so" (Simon in Williamson, 1985, p. 45). Williamson also argues that whereas conditions of unbounded rationality allow

economic agents to carefully plan for all transactional contingencies, bounded rationality requires that such actors recognize their limited cognitive capacities and choose governance structures which economize such limitations.

Opportunism, as it pertains to transaction cost economics, is concerned with the self-interest seeking behavior of economic agents, wherein they purposefully distort information relevant to their participation in economic exchange (Williamson, 1985). Williamson explains that opportunistic behavior is both active and passive, that it is present before and after transactions occur, and that it is not consistent among economic participants. Were it not for opportunism, he posits that transactions would be characterized by contractual promises through which participants would agree to joint-profit maximization. Such is the assumption of neoclassical economics. Transaction cost economics proposes, however, that economic participants recognize the presence of opportunism in their exchange relationships and choose governance structures through which opportunism is economized.

Asset specificity, frequency, and uncertainty. Transaction cost economics also maintains that transactions are governed by three critical dimensions (Williamson, 1985). These include (a) the transaction's degree of asset specificity, (b) its frequency of occurrence, and (c) its degree of uncertainty. Asset specificity is most important of the three and represents the degree to which assets associated with transactions are easily transferred from one bidder to another (i.e., idiosyncratic). Williamson suggests that transactions are often not easily transferable (e.g., human training, physical capital, or set-up costs) and that such transactions are most efficaciously governed through long term relationships where the identity of economic agents is considered important. Williamson also emphasizes the importance of frequency and uncertainty to transaction cost economics. Frequency is concerned with how often a transaction occurs, and uncertainty is the degree

to which transactional complexity is dealt with in an adaptive and sequential manner. All three dimensions affect transactions, and the interrelationship between them will determine the type of governance structure developed through economic exchange.

Transactional enforcement. Emphasizing exchange as the basic unit of economic organization, Williamson (1985) considers transaction cost economics to be problem of contracting. He suggests that contracts facilitate exchange and that as transactions increase in their complexity, so too do the contractual considerations through which they are governed. It follows, therefore, that simple transactions are aligned with simple contractual relationships and that complex transactions are aligned with complex contractual relationships. Of particular interest to transaction cost economics is the manner through which contract enforcement changes along this continuum. Using Macneil's (in Williamson, 1985) three-way classification of contracts, Williamson suggests that contracts may be enforced through court ordering, arbitration, or private ordering.

Court ordering is the simplest form of contract enforcement. It assumes short term relationships where all possible exchange contingencies are considered in the contract document. The contract serves as the focal point of the transaction, and it is enforced through legal systems. Arbitration is the intermediary form of contract enforcement. It is concerned with long term relationships where not all possible contractual contingencies are known and where future adaptation is required. The contract is still the focal point of the relationship, but rather than court ordering which relies on established rules, parties agree to third-party arbitration for negotiating previously unestablished contractual differences or interpretations. Private ordering is the most complex of the three enforcing methods. It is concerned with long term, highly specific relationships where transactions develop norms beyond those established in the original contract. Consequently, the relationship serves as

the focal point of exchange and enforcement occurs through administrative adjustment between the contracting parties.

Economic organization. Williamson (1985) presents economic organization as a problem of contractual enforcement where four different scenarios determine the interrelationship between bounded rationality, opportunism, and asset specificity. Planning is the first form of economic organization and is representative of transactions characterized by opportunism and asset specificity, but not bounded rationality. Given the absence of bounded rationality, economic agents, with full knowledge of transactional contingencies, negotiate comprehensive contracts prior to the beginning of their exchange wherein safeguards from opportunistic behavior are incorporated and subsequently enforced through court ordering.

Williamson's (1985) second form of economic organization is promise and represents transactions characterized by bounded rationality and asset specificity, but not opportunism. Given this scenario, economic agents contractually agree to act fairly towards one another with respect to unforeseen transactional contingencies. Williamson argues that such agreement represents the substitution of strategic planning for self-enforcing general agreement among parties to the exchange, where parties mutually agree to resolve unforeseen contractual contingencies and disputes in a manner that is considered fair. Contracts of this nature are enforced through promise.

Williamson's (1985) third form of economic organization is competition and is representative of transactions characterized by bounded rationality and opportunism, but not asset specificity. Given the absence of asset specificity, economic assets are easily transferable (i.e., the identity of economic agents is unimportant) and behavioral threats are considerably diminished due to the availability of alternative agents with whom recurrent spot contracting may occur. This scenario is described by Williamson as discrete market

contracting, and he posits that transactions of this nature are enforced through court ordering.

The final form of economic organization, described by Williamson (1985) as the "full catastrophe," represents transactions characterized by bounded rationality, opportunism, and asset specificity. Given such conditions, bounded rationality incapacitates attempts at planning, opportunism negates the reliability of promise, and asset specificity diminishes competitive contracting. These are the transactions, according to Williamson, with which transaction cost economics is interested, and he suggests the following organizational imperative: "Organize transactions so as to economize on bounded rationality while simultaneously safeguarding them against the hazards of opportunism" (Williamson, 1985, p. 32). Further, Williamson suggests that transactions of this nature are enforced through systems of arbitration and private ordering.

Governance structures. Williamson (1991) posits that transactions are organized on a continuum between markets and hierarchies. As indicated above, Williamson (1991) suggests that where assets are not specific, transactions are organized according to a market governance model (economic competition). However, as the degree of asset specificity increases, and where the behavioral conditions of bounded rationality and opportunism are present, Williamson (1991) maintains that governance structures evolve to economize transaction cost. Where assets are specific, therefore, transaction cost economics suggests that transactions are either vertically integrated into hierarchical governance structures, or placed into hybrid governance structures. Williamson (1991) posits, further, that transactional governance (whether as market, hybrid, or hierarchy) is a problem of environmental adaptability. However, whereas market adaptability is primarily an issue of price, and hierarchical adaptability is concerned with administrative process and fiat, hybrid adaptability remains relatively undefined. Nevertheless, Williamson (1991) argues that

hybrid adaptation occurs and that it exhibits characteristics distinctive from market and hierarchical adaptation. This study suggests that the hospital/PPO relationship is organized within a hybrid governance structure, where adaptive mechanisms are designed to economize transaction costs.

Transaction cost economics, governance, and PPOs. The above identified conceptual model of hospital participation with PPOs gave limited attention to transaction cost considerations associated with the hospital/PPO relationship. This study postulates that the examination of transaction cost economics provides significant insight to the relationship between hospitals and PPOs and specifically, to the ways in which hospitals govern contractual participation with PPOs. Germane to this examination is the presupposition that the hospital/PPO relationship is representative of a hybrid governance structure (i.e., between market and hierarchical governance), where exchange is characterized by the presence of asset specificity, bounded rationality, and opportunism. Williamson's (1985) transactional imperative, therefore, suggests that hospitals organize transactions with PPOs "so as to economize bounded rationality while safeguarding them against the hazards of opportunism" (Williamson, 1985, p. 32). Transaction cost economics also suggests that governance of the hospital/PPO relationship includes concerns of environmental adaptability (Williamson, 1991).

Research Aims and Hypotheses

Applicable to this study, Scott and Flood (1987, p. 13) have described organizations, and particularly hospitals, as complex systems whose salient features vary according to the intent of the questioner. Unlike previous research concerning PPOs, which focused on PPO modeling and the ability of PPOs to control medical costs while delivering quality health care services (e.g., Boland, 1985; de Lissovoy et al., 1986; Gabel et al., 1986; Garnick et al., 1990; Zwanziger & Auerbach, 1991), this study investigated the exchange

between hospitals and PPOs. Further, it hypothesized that this exchange was a problem of environmental adaptability and was characterized by the development of and changes to bureaucratic and transaction organizational control mechanisms (OCM). As an alternative avenue of investigation, the study was designed to provide insight and perspective to the hospital/PPO relationship; a relationship of particular importance to the success of PPOs in accomplishing the goals upon which they have evolved.

Bureaucratic OCMs. Hospitals, as a result of participation with PPOs, developed and experienced changes to bureaucratic organizational control mechanisms. Ouchi (1979) defined bureaucratic OCMs as the control of subordinates by supervisors through established rules which direct the accomplishment of organizational objectives. With respect to the hospital/PPO relationship, bureaucratic OCMs were concerned with the interaction between subordinates and supervisors responsible for PPO contracting and the way that this interaction was organized to accomplish hospital objectives. Investigation of this hypothesis explored (a) the location of the PPO contracting role in the bureaucratic hierarchy of hospitals, (b) the staff responsible for PPO contracting activities, and (c) the degree of integration between the PPO contracting role and other hospitals departments. Each is discussed separately below.

Weber (1947) defined bureaucratic hierarchy as the organizational hierarchy of offices such that lower offices were under the control and supervision of higher offices. Bureaucratic hierarchy of the PPO contracting role was concerned, therefore, with the location of, and the supervisory relationship between, the employment position of the hospital person most responsible for negotiating, coordinating, and managing PPO contracts and the employment position of the hospital individual to whom the former was organizationally responsible. It was hypothesized that the presence of a PPO contracting role represented the development of a PPO specific bureaucratic OCM and that movement

of this position within the bureaucratic hierarchy identified change to the OCM. For purposes of this study, the PPO contracting role was identified and described with respect to the employment title of the hospital person most responsible for PPO contracting and the employment title of the hospital individual to whom the person responsible for PPO contracting reported.

Staff responsible for PPO contracting represented those hospital employees responsible for fulfilling activities specific to the negotiation, coordination, and management of PPO contracts. This definition included the person most responsible for PPO contracting and implicitly distinguished between division of labor and departmentation. Weber (1947) defined division of labor as the specialization of work in order to accomplish organizational objectives, and Gulick and Urwick (1937) defined departmentation as the grouping of similar work activities to accomplish specialized functions. The study hypothesized that the structure of the staff responsible for PPO contracting, with respect to division of labor and departmentation, represented the development of a PPO specific bureaucratic OCM and that changes to the staffing structure resulted in changes to the OCM. PPO staffing structure was explored in terms of the number of hospital employees responsible for PPO contracting activities and the presence of an organizational department through which such activities were arranged.

Lawrence and Lorch (1969) defined integration as "the quality of the state of collaboration that exists among departments that are required to achieve unity of effort by demands of the environment" (p. 11). The degree of integration between the PPO contracting role and other hospital departments referred, therefore, to the collaboration between the person and/or department responsible for PPO contracting and those departments whose ability to accomplish organizational objectives was affected by PPOs. It was hypothesized that such integration represented the development of a PPO specific

bureaucratic OCM and that changes in the integrative relationship portrayed changes to the OCM. Integration between the PPO contracting role and other hospital departments was investigated with respect to the identification of those hospital departments with which the person responsible for PPO contracting consulted when analyzing PPO contract participation and the structure of the collaborative relationship.

Transaction OCMs. Hospitals, as a result of participation with PPOs, developed and experienced changes to transaction organization control mechanisms. Transaction OCMs, heretofore undefined in the literature, were defined as mechanisms external to an organization's structure through which contractual participation was controlled and the organizational objectives of such participation met. Pertinent to PPOs, transaction OCMs were defined as external mechanisms through which hospitals controlled and met their organizational objectives in contractual relationships with PPOs. Investigation of this hypothesis explored (a) PPO specific policies and procedures, (b) affiliation with independent practice associations (IPA), and (c) financial stop-loss provisions. Each is discussed separately below.

Policies and procedures were defined as guidelines, both expressed and implied, through which organizations directed behavior, decision-making, and thinking consistent with their organizational objectives (Rakich, Longest, & Darr, 1985). Hospital policies and procedures pertinent to PPO contracting were defined, therefore, as expressed or implied guidelines, consistent with organizational goals and objectives, that directed behavior, decision-making, and thinking with respect to hospital participation with PPOs. This study hypothesized that the use of such policies and procedures identified the development of a PPO specific transaction OCM and that changes in the structure or use of such policies and procedures depicted changes to the OCM. Policies and procedures

specific to hospital participation with PPOs were investigated with respect to their use among participating hospitals.

Tibbitts and Manzano (1984) have defined IPAs as independent physicians who collectively participate in managed care contracts for the purpose of delivering health care services to defined populations while maintaining their fee-for-service practice. With respect to PPOs, hospital affiliation with IPAs was defined as the expressed or implied relationship between a hospital and an IPA where the parties mutually agreed to participate in PPO contracts with the intent of coordinating the delivery of health care services and retaining their individual autonomy. The definition recognized that such affiliation represented a hospital established patient channeling mechanism beyond those developed by PPOs (i.e., decreased cost sharing for patients utilizing preferred providers). It was hypothesized that hospital affiliation with IPAs, for purposes of PPO contracting, identified the development of a PPO specific transaction OCM and that changes to the structure of this affiliation demonstrated changes to the OCM. IPA affiliation was explored in terms of the presence of such relationships and the type of support, if any, provided by hospitals to their affiliated IPA.

The American Association of Preferred Provider Organizations (1988) reported that PPO reimbursement, although fee-for-service, assumed a variety of structures that reflected demands both of hospitals and PPOs. Three primary structures were (a) first dollar percentage discounts, (b) global or multiple per diems, and (c) case mix reimbursement based on diagnosis related groups (DRG). Respectively, each structure was reported to represent greater financial risk, and of the three, the latter two were considered most likely to result in catastrophic financial loss for hospitals. Financial stop-loss provisions were defined, therefore, as per case contractual conditions designed to supersede negotiated reimbursement terms in the event of unforeseen circumstances where hospitals were

threatened with significant financial loss. It was hypothesized that the use of financial stop-loss provisions identified the presence of a PPO specific transaction OCM and that change in the frequency of use of such provisions depicted change to the OCM. Financial stop-loss provisions were investigated with respect to their inclusion in the negotiated reimbursement terms between hospitals and PPOs.

Literature Review

The governance of contractual relationships between hospitals and PPOs has received little attention in the academic literature, where discussion has concentrated on the modeling of PPOs and their ability to achieve cost savings while managing the delivery of health care services (e.g., de Lissovoy et al., 1986; Gabel et al., 1986; Garnick et al., 1990; Zwanziger & Auerbach, 1991). Despite the lack of academic literature, a small number of trade specific articles have appeared and are discussed below.

Schroer and Weinberg (1988) have argued that PPOs are the result of significant changes in the health care environment that have considerably weakened hospitals and their ability to function as providers in the health services arena (i.e., the reduction of government reimbursement for medical services, the advent of competitive market forces, and the surplus of hospital beds and physicians) . They have suggested, further, that contractual participation with PPOs has introduced important financial, managerial, and legal perspectives previously unconsidered by hospitals. In their article, Schroer and Weinberg briefly presented a multiplicity of pre-operational issues pertinent to hospital participation with PPOs. Of particular importance to their discussion was the emphasis that although PPO participation required financial consideration and analysis, it also required that hospitals commit to inherent organizational demands of the relationship such as the availability of staff to coordinate activities germane to PPO participation and the impact of PPO participation on medical staff relations.

Harrison and Hranchak (1988) have argued that the delivery of health services has entered a competitive "business-like" era where competition is increasingly price-sensitive (i.e., hospital competition based on the price of delivered services, as well as quality and high technology). On this premise, they suggested that contractual participation with PPOs represented organizational adaptability with which hospitals should be concerned. Specifically, Harrison and Hranchak emphasized consideration of (a) the provided hospital services, (b) the PPO patient demographics (Will the hospital see patients with needs different than the needs of those seen prior to PPO participation?), (c) the development of and adherence to hospital utilization review criteria, (d) the fee negotiation, and (e) the billing and payment terms. Similar to Schroer and Weinberg's (1988) assessment of the hospital/PPO relationship, Harrison and Hranchak stressed the importance of recognizing governance demands specific to PPO participation, as well as the importance of financial considerations.

With respect to hospital contracts with PPOs, Kalm and DeMuro (1988) have suggested that contract participation a three step process wherein (a) the credibility and financial solvency of a PPO are investigated, (b) the contract language and financial terms between the hospital and PPO are negotiated, and (c) the relationship is implemented and its effects on the hospital monitored and evaluated against established criteria. The authors provided specific criteria and advice for each step along the continuum and suggested that the contract process be coordinated by a formalized negotiating team responsible for establishing the hospital's strategic objectives concerning PPO participation. Kalm and DeMuro have enhanced the literature discussed above in their recognition that the contracting process occurs along a continuum and is not complete once the contract between a PPO and hospital is initially executed.

Similar to Kalm and DeMuro (1988), Merz (1991) has suggested that hospital participation with PPOs continues beyond contractual signature. Merz, however, has also recognized the limited negotiating power of hospitals and PPOs (bounded rationality) as a result of their divergent goals and objectives, and he has argued, therefore, that operational issues of the contract only become apparent once the hospital/PPO relationship is implemented. In order to safeguard against unforeseen operational concerns, Merz has suggested that hospitals carefully identify their goals and objectives concerning PPO participation and that such goals and objectives take into account the hospital's ongoing service requirements concerning treatment of PPO patients. Merz postulated that operational issues pertinent to the hospital/PPO relationship represented additional costs that required effective management if PPOs were to be successful in reducing medical expenses.

The articles discussed above indicate the increasing concern regarding hospital governance of PPO relationships. However, specific concerns arise from the literature. Each article, for example, assumes that the PPO model is effective in reducing medical expenditures. Whether this assumption is true remains to be seen (Hester, Wouters, & Wright, 1987; Zwanziger & Auerbach, 1991). Also, the articles focus primarily on pre-operational contract concerns with little regard for post-operational conditions. This was true even of Kalm and DeMuro (1988) and Merz (1991) who specifically argued the importance of post operational issues associated with PPO participation, yet discussed pre-operational guidelines through which post operational concerns could be avoided. The final concern with these articles is that they were not empirically based and, thus, were unable to support their arguments via observational data.

This literature review is also concerned with the application of transaction cost economics to health service problems. Although no empirical studies have been conducted,

Gardner (1991) has proposed the use of transaction cost economics to provide insight to the problem of physician discretionary behavior (i.e., physician practice style) and the variation of prostatectomy rates within geographic areas.[8] Gardner distinguished between physician practice style and factors outside physician intervention (e.g., disease prevalence and patient initiated use of ambulatory care), wherein she proposed to assess prostatectomy rate variation along a continuum of care, rather than just at the point of surgery. Gardner has postulated that the physician-patient relationship occurs along this continuum, and that this relationship is a form of contract (or transaction) where assets are highly specific and where bounded rationality and opportunism are economized.

Similarly, Conrad, Mick, Madden, and Hoard (1988) have provided a conceptual framework and empirical review of vertical structures in health care markets that rely heavily on transaction cost considerations. They have argued that the structure and organization of the health care industry has changed considerably since the early 1980s, wherein independent community hospitals have been replaced by complex vertically integrated structures.[9] Conrad et al. proposed a conceptual framework in which they jointly considered and synthesized neoclassical economic price theory and transaction cost economics, wherein their conjunctive premise was profit maximization. Given this premise, they argued that health service organizations responded to economic forces of supply and demand through changes to their product (i.e., pricing structure, packaging methods, or delivery channels) or changes to their organizational structure, where the former was concerned with neoclassical economic price theory and the latter with transaction cost economics. Conrad et al. reasoned, therefore, that the health care structures of the 1980s represented the decision to maximize profit via changes in organizational structure, or more specifically, health care organizations economized transaction costs through vertical integration.

The application of transaction costs by Conrad et al. (1988), however, is not consistent with Williamson's (1985) treatment of transaction cost economics. Conrad et al., for example, have accepted that transactions occur along the critical dimensions identified by Williamson (i.e., asset specificity, frequency, and uncertainty) and that transactions are subject to opportunism, but they have not considered the behavioral condition of bounded rationality. Williamson has argued, however, that minus bounded rationality, the world of contract is simplified to one where economic agents are able to develop comprehensive contractual relationships, where they identify and protect themselves from all transactional hazards (i.e., opportunism). Williamson has also argued that given the absence of bounded rationality, contracts are easily enforced through court ordering and recognize little efficiency from alternative enforcement mechanisms (arbitration and private ordering). By neglecting bounded rationality, Conrad et al. have suggested either that their model of vertical integration is simply a planning model where vertically integrated health care structures develop through careful consideration and understanding of the market place, or that their model is incomplete in its understanding of the behavioral influences which affect economic organization.

Also, of concern is the conjunctive premise upon which Conrad et al. (1988) have developed their model of vertical integration. Recall, they have claimed that the purpose of economic organization is to maximize profits. Although Williamson (1985, p. 22) has acknowledged that economic costs are equal to the sum of production and transaction costs, he has not ascribed profit maximization, the imperative of neoclassical economic price theory, to transaction cost economics. Rather, he has suggested the following imperative when transactions are characterized by asset specificity, bounded rationality, and opportunism: "Organize transactions so as to economize on bounded rationality while simultaneously safeguarding them against the hazards of opportunism" (Williamson, 1985,

p. 32). This distinction, according to Williamson, allows for a more comprehensive view of the economic problem, wherein it recognizes that the behavioral conditions of exchange, given asset specificity, are integral to the study of economic organization.

Mick and Conrad (1988) have also discussed transaction costs with respect to vertical integration strategies developed by managers of health care organizations. They have argued that analysis of transaction costs will provide managers with a more analytic view of the costs associated with vertical integration. Further, Mick and Conrad have maintained that transaction costs occur in markets and in organizational structures and that the most appropriate strategy concerning vertical integration, therefore, is the option (i.e., market or organizational structures) which minimizes transaction costs (production costs are assumed equal in either alternative). Consistent with Williamson (1985), Mick and Conrad have maintained that although transaction costs are difficult to measure, exact measurements are less important than the degree to which they are present in alternative types of transactions. Given this premise, they have suggested that specific indicators of transaction costs can be identified both in markets and in organizational structures (e.g., contract enforcement costs as opposed to internal management costs) and that these indicators provide insight to the economic problem of vertical integration. Similar to Conrad et al. (1988), it is not clear whether Mick and Conrad recognize the importance of behavioral conditions (i.e., bounded rationality and opportunism) to the study of transaction cost economics. The issue, however, will not be belabored.

Chapter III

Study Design

This study was designed as a retrospective, non-experimental investigation of hospital participation with preferred provider organizations (PPO). It was qualitative and was intended to describe the development of and changes to organizational control mechanisms used by hospitals to organize PPO relationships. The study design is discussed below in three sections. These are (a) the data source, (b) the methodology, and (c) the survey instrument.

Data source. The study gathered data from 14 San Francisco Bay Area hospitals participating in PPO contracts with the Pacific Health Alliance (PHA). PHA is a non-profit hospital consortium owned and operated by hospitals in Northern California and is responsible for developing PPO relationships between its contracted providers (hospital, physician, and ancillary services) and third-party payers. The PHA hospitals represented a sample of convenience, chosen for their known participation with PPOs. It was important to the study that subjects be familiar with their hospitals' experience with PPOs; consequently, persons responsible for PPO contracting were selected as the most appropriate respondents. PHA maintains a list of individuals responsible for negotiating, coordinating, and managing PPO contracts at each of its affiliated hospitals, and this list was used to identify potential subjects.

Methodology. The study was designed as a pre-scheduled telephone survey, participation was voluntary, and potential subjects were assured that non-participation did not affect their hospital's relationship with PHA. PHA's president reviewed and approved all correspondence concerning participation in the study which was sent by the investigator on the organization's official letterhead. Protocol for the study methodology is presented below, and copies of all correspondence are attached as Appendix A.

1. Correspondence was sent to each identified hospital's PPO contracting representative, wherein the study's objectives were discussed and the hospital's participation formally requested. All PHA hospitals in the San Francisco Bay Area received this correspondence.

2. Two weeks following completion of step one, telephone calls were made by the investigator to all PPO contracting representatives to whom correspondence was sent. Participation in the study was again requested, and interview times were scheduled for those representatives that agreed to participate.

3. One week prior to scheduled interviews, subjects were sent correspondence that confirmed the time and date of their participation in the study. A listing of the interview questions was included with the correspondence so that subjects could research information they felt necessary for particular responses.

4. Interviews were conducted by a non-partisan interviewer according to the schedule established in step (2). Adhering to protocol approved by the San Jose State University Institutional Review Board - Human Subjects, all interviews began with a presentation of the study's Statement of Informed Consent (attached as Appendix B). This was designed to assure respondents that their participation in the study was voluntary, that they could terminate the interview at any time, and that their responses to the survey would be presented only as aggregate data. Informed consent was implied if subjects responded to the survey questions.

5. After completion of the interview, correspondence was sent to subjects wherein they were thanked for their participation, notified that they would receive a copy of the study results, and provided with telephone numbers to call if they had questions or concerns regarding the study.

Survey instrument. The study utilized a questionnaire (attached as Appendix C) developed by the investigator to explore the hypotheses presented above in chapter two. The questionnaire combined closed and open-ended questions designed to: (a) identify the development of and changes to bureaucratic and transaction OCMs; (b) determine whether such mechanisms were attributable, and/or important, to hospital participation with PPOs; (c) provide respondents with an opportunity to explain changes in their hospital's relationship with PPOs; and (d) gather demographic information relevant to the hospital/PPO relationship.

Pertinent to these goals, the questionnaire was designed to capture data for two years of reference in the hospital/PPO relationship. The first reference year was variable and was identified to respondents as their hospital's first full calendar year of PPO participation. A variable date was used in order to decrease the risk of not capturing information associated with either a fixed date prior to PPO participation, or conversely, a fixed date after the occurrence of PPO related changes. Respondents unaware of their hospital's first full calendar year of PPO participation were instructed to use 1987 as the first reference year. The second point of reference was 1990 which represented the last full calendar year of PPO participation prior to implementation of the study.

With respect to the study's projected sample size (16 hospitals), the survey instrument included questions designed to gather descriptive data in a manner that would facilitate the simple presentation of PPO related trends among participating hospitals. Consequently, survey questions were of three categories whose use was dependent on the nature of information requested. Category one questions were descriptive and designed to gather data relevant to the hospital/PPO relationship (e.g., the number of PPOs with which hospitals contracted and the employment title of persons responsible for PPO contract negotiation, coordination, and management). These questions were particularly important

for identifying the presence of OCMs so that subsequent questions could investigate the pertinence of such mechanisms to responding hospitals. The category included qualitative and quantitative questions that were either closed, or open-ended.

Category two questions were designed to identify whether respondents considered specific OCMs attributable to PPO contracting and/or important to the hospital/PPO relationship. These questions were closed-ended and structured so that data would be skewed to distinguishable qualitative extremes. That is to say, a particular OCM was "not at all or slightly attributable" to PPO contracting, or it was "moderately to very attributable." Likewise, an OCM was "not at all or slightly important" to the hospital/PPO relationship, or it was "moderately to very important." Qualitative extremes were chosen as a result of the study's projected sample size and its subsequent inability to obtain statistically significant quantitative data. Also, because the questionnaire was designed to identify the development of and changes to OCMs, category two questions were more concerned with identifying such developments and changes than with measuring the degree to which they occurred.

Category three questions were open-ended and designed to provide respondents with an opportunity to interpret their responses to individual questions. Exploratory in nature, these questions were designed to obtain insight to reported developments and changes among bureaucratic and transaction OCMs. In addition to formal opportunities for providing professional insight, subjects were also encouraged, where they felt it necessary, to explain responses to closed-ended questions.

Given the diversity of information requested from the survey instrument, it was anticipated that subjects would have difficulty providing responses to all questions. The questionnaire allowed subjects, therefore, to report that they did not know a particular answer, or that the information necessary for an appropriate response was not available.

These responses were distinguishable in that the first was included to demonstrate a respondent's lack of knowledge and the latter, a respondent's lack of information and subsequent limited knowledge.

The questionnaire was organized into three sections. These included (a) demographics, (b) bureaucratic OCMs, and (c) transaction OCMs. The first section, demographics, was intended to verify that responding hospitals participated with PPOs and that subjects were responsible for negotiating, coordinating, and managing PPO contracts. It also investigated the number of managed care and PPO contracts with which responding hospitals participated and explored the perceived importance of such relationships. The second and third sections of the survey instrument, bureaucratic OCMs and transaction OCMs, were designed to investigate the study's working hypotheses with respect to the identified OCMs. Questions associated with each section of the survey instrument are discussed in Appendix D.

Pretest

Prior to the study's implementation, pretests were conducted with two individuals responsible for managed care contract negotiation, coordination, and management in separate San Francisco Bay Area hospitals and with one individual that had been responsible for managed care contract activities in a San Francisco Bay Area hospital between 1988 and 1990. The purpose of the pretest was to establish that the questionnaire captured data in a manner consistent with the investigator's expectations and to verify that respondents understood the utilized terminology. Pretest questionnaires were administered during personal interviews conducted by the investigator.[10] Upon completion of the interview, respondents were asked to comment regarding their concerns. Results of the pretest demonstrated that the questionnaire captured the desired data and that respondents understood its terminology.

Chapter IV

Study Results

Exploratory in nature, this study gathered a substantial amount of data with respect to hospital participation with PPOs. Representing 14 of the 16 PHA hospitals invited to participate, the study had an 87.5% response rate.[11] Of the 14 hospitals in the sample, all completed the telephone survey in approximately 20 to 30 minutes. The data is reported in a format consistent with the questionnaire's three sections (i.e., demographics, bureaucratic OCMs, and transaction OCMs).

Demographics. Respondents were asked whether they were the person in their hospital, at the time of study, responsible for PPO contracting activities. All subjects reported that they were organizationally responsible for such activities. Subjects were also asked to report their employment title at the time of study. Although not presented so as to protect the identity of participants, the employment title of persons responsible for PPO contracting showed significant variation among respondents. Despite the variation, however, 12 of 14 employment titles identified subjects as responsible for PPO, managed care, or contracting activities.

With respect to demographic information at the time of study, subjects were asked whether their hospital participated in managed care contracts with third-party payers where such relationships required that the hospital adhere to cost control measures. The definition included participation with health maintenance organizations (HMO), PPOs, insurance companies, Medicare, Medi-Cal, and direct employer contracts. All subjects reported that their hospital participated in contractual relationships with such managed care entities at the time of study.

Concerning managed care contracts, hospitals were asked to report the number of such relationships with which their hospital participated in 1985 and in 1990.[12] For both years,

the mean, median, and mode were calculated wherein the data indicated that responding hospitals participated in a greater number of managed care contracts in 1990 than in 1985 (see Table 1). For example, hospitals reported a mean of 9.8 managed care contracts with which they participated in 1985; however, for 1990, they reported a mean of 58.6 managed care contracts. This represented approximately a 500% increase in the reported number of such contractual relationships between 1985 and 1990.

The study also investigated the perceived importance of managed care contracts in 1985 and in 1990. In order to compensate for over-reporting, subjects were asked to respond from the perspective of their hospital administrator/chief executive officer (CEO). Subjects reported that participation in managed care contracts was more important to their hospital administrator/CEO in 1990 than in 1985 (see Table 2). With respect to 1985, 35.7% of the sample reported that their administrator/CEO considered managed care contracting "moderately to very important" to their hospital, whereas for 1990, 92.9% of the sample reported that such contractual relationships were "moderately to very important" to their hospital administrator/CEO.

With respect to managed care contracts, the study was particularly interested in HMOs and the degree with which sample hospitals participated in HMO contracts in 1985 and in 1990. Subjects were asked to report the percentage of patient mix their hospital attributed to HMOs for each reference year. The mean, median, and mode were calculated for each year, wherein the data indicated that responding hospitals attributed a greater percentage of their patient mix to HMOs in 1990 than in 1985 (see Table 3). In 1985, for example, the mean percentage of reported patient mix attributed to HMOs was 7.4%; however, by 1990, this number had increased to 15.6%. This represented approximately a 100% increase in the percentage of reported patient mix subjects attributed to their hospitals' participation with HMOs between 1985 and 1990.

Table 1

Average Number of Managed Care Contracts

	Managed care contracts		
Year	Mean	Median	Mode
1985[a]	9.8	10.5	10.0
1990	58.6	49.0	40.0

[a] Only 8 subjects responded for 1985 (see Footnote 12).

Table 2

Importance of Managed Care Contracts

	Year	
Importance (in percentages)	1985[a]	1990
Not or slightly	42.9	7.1
Moderately to very	35.7	92.9
Information not available	14.3	0
Don't know	7.1	0

[a]See Footnote 12.

Table 3

Average Percentage of Patient Mix Attributed to Health Maintenance Organizations (HMO) Contracts

	Percentage HMO patient mix		
Year	Mean	Median	Mode
1985[a]	7.4	1.0	1.0
1990[b]	15.6	10.0	NA[c]

[a] Only 7 subjects responded for 1985 (see Footnote 12). [b]Only 7 subjects responded for 1990. [c]The reported data did not indicate a mode representative of the percentage of hospital patient mix attributable to HMO contracts for 1990.

With respect to the hospital/PPO relationship, subjects were asked whether their hospital, at the time of study, participated in contractual relationships with PPOs. All subjects reported that their hospital participated in contractual relationships with PPOs. Regarding such participation, subjects were also asked to report the first full calendar year that their hospital participated in contractual relationships with PPOs. The data is reported in Table 4 which indicates that a predominant number of hospitals in the study began contracting with PPOs prior to 1985. As indicated above, the reported first full calendar year of PPO participation was used as the first reference year for questions concerning hospital participation with PPOs. Also, subjects unaware of their hospitals' first full calendar year of PPO participation were asked to respond to questions using 1987 as the

first year of reference. The first full calendar year of hospital participation with PPOs is hereinafter referred to as 19xx.

Table 4

Year Hospital Began Contracting with Preferred Provider Organizations (PPO)

Year (19xx)[a]	Frequency
1983	4
1984	4
1985	2
1986	0
1987	1
Don't Know	3

[a]19xx represented a hospital's first full calendar year of participation with PPOs.

Like managed care contracts, subjects were asked to report the number of PPOs with which their hospital participated in 19xx and in 1990. For both reference years, the mean, median, and mode were calculated wherein the data indicated that responding hospitals participated in a greater number of PPO contracts in 1990 than in 19xx (see Table 5). Hospitals, for example, reported a mean of 7.5 PPOs with which they participated in 19xx; however, for 1990, they reported a mean of 43.2 PPO contracts. This represented approximately a 475% increase in the reported number of such contractual relationships between 19xx and 1990.

Table 5

Average Number of Preferred Provider Organization (PPO) Contracts

	PPO contracts		
Year	Mean	Median	Mode
19xx[a]	7.5	5.5	5.0, 10.0[b]
1990	43.2	36.0	40.0

[a] 19xx represented a hospital's first full calendar year of participation with PPOs. Only 10 subjects responded for 19xx. [b]The data indicate two separate modes.

The study also investigated the perceived importance of PPO contracts in 19xx and in 1990. Like with managed care contracting, subjects were asked to respond from the perspective of their hospital administrator/chief executive officer (CEO). Subjects reported that participation in PPO contracts was more important to their hospital administrator/CEO in 1990 than in 19xx (see Table 6). With respect to 19xx, 21.4% of the sample reported that their administrator/CEO considered managed care contracting "moderately to very important" to their hospital, whereas for 1990, 100% of the sample reported that such contractual relationships were "moderately to very important" to their hospital administrator/CEO.

Table 6

Importance of Preferred Provider Organization (PPO) Contracts

	Year	
Importance (in percentages)	19xx[a]	1990
Not or slightly	78.6	0
Moderately to very	21.4	100
Information not available	0	0
Don't know	0	0

[a] 19xx represented a hospital's first full calendar year of participation with PPOs.

Similar to HMOs, the study was particularly interested in the degree with which hospitals in the sample participated in PPO contracts in 19xx and in 1990. Subjects were asked to report the percentage of patient mix their hospital attributed to PPOs for each reference year. The mean, median, and mode were calculated, wherein the data indicated that responding hospitals attributed a greater percentage of their patient mix to PPOs in 1990 than in 19xx (see Table 7). Regarding 19xx, for example, the mean percentage of reported patient mix attributed to PPOs was 4.2%; however, by 1990, this number had increased to 15.1%. This represented approximately a 260% increase in the percentage of reported patient mix subjects attributed to their hospitals' participation with PPOs between 19xx and 1990.

Table 7

Average Percentage of Patient Mix Attributed to Preferred Provider Organizations (PPO)

	Percentage patient mix		
Year	Mean	Median	Mode
19xx[a]	4.2	1.5	1.0
1990[b]	15.1	10.0	10.5

[a] 19xx represented a hospital's first full calendar year of participation with PPOs. Only 6 subjects responded for 19xx. [b]Only 7 subjects responded for 1990. [c]The reported data did not indicate a mode representative of the percentage of hospital patient mix attributable to PPO contracts for 1990.

Bureaucratic OCMs. The bureaucratic hierarchy of the PPO contracting role was the first bureaucratic OCM investigated. Subjects were asked to report the employment title of the person in their hospital responsible for PPO contracting activities in 19xx and in 1990. In order to preserve respondent confidentiality, the reported employment titles of persons responsible for PPO contracting are not identified. Such titles were, however, categorized according to whether they were representative of responsibility associated with senior level management, middle level management, or non-management employment positions (see Table 8). The data indicate that the employment title of the hospital person responsible for PPO contracting shifted from a senior or middle level management title in 19xx to a middle level management title in 1990. Also, whereas only 18% of the reported titles for 19xx

indicated specific responsibility for managed care or PPO contracting activities, 85.7% of the titles reported for 1990 indicated such responsibility. Respondents attributed this shift to a change in their hospitals' bureaucratic hierarchy as a result of increased responsibility associated with managed care contracting (including PPOs). To quote one respondent, "Yes, this was a change in bureaucratic hierarchy. PPO contracting wasn't important enough in 19xx to warrant a full-time person, but by 1990, the importance had increased, and a person was required."

Table 8

Employment Title of Hospital Employee Most Responsible for Contracts with Preferred Provider Organization (PPO)

Title	Percentage (%)
19xx[a]	
Senior level management	45.5
Middle level management	45.5
Non-management	9.0
1990	
Senior level management	7.1
Middle level management	78.6
Non-management	14.3

[a] 19xx represented a hospital's first full calendar year of participation with PPOs. Only 11 subjects responded for 19xx

Subjects were also asked to report, with respect to the same reference years, the employment title of the individual to whom the person responsible for PPO contracting reported in their hospitals' bureaucratic hierarchy. Again, specific titles are not reported in order to preserve respondent confidentiality; however, for discussion of the data, they were categorized either as (a) chief executive office, (b) chief financial officer, (c) vice president (non-financial), or (d) director (see Table 9).

Table 9

Employment Title of the Person to Whom the Employee Most Responsible for Preferred Provider Organization (PPO) Contracting Reported

Title	Percentage (%)
19xx[a]	
Chief executive officer	71.4
Chief financial officer	14.3
Vice president (non-financial)	14.3
Director	0
1990	
Chief executive officer	21.4
Chief financial officer	42.9
Vice president (non-financial)	28.6
Director	7.1

[a] 19xx represented a hospital's first full calendar year of participation with PPOs.

With respect to 19xx, 71.4% of the subjects responded that the person responsible for PPO contracting reported to the hospitals' chief executive officer. In 1990, however, 42.9% of the sample reported that the person responsible for PPO contracting reported to their hospitals' CFO, whereas only 21.4% reported to their hospitals' CEO. Again, subjects attributed this shift to a change in the hospitals bureaucratic hierarchy.

Staff responsible for PPO contracting activities represented the second bureaucratic OCM investigated by the study. As such, respondents were asked whether their hospital had a managed care contracting department in 19xx and in 1990. For the first reference year, 14.3% of the sample reported that their hospital had a such a department, whereas the remaining 85.7% responded that their hospital did not have a managed care contract review department. However, in 1990, the responses were nearly the reverse, wherein 78.6% of the sample reported the existence of a managed care contracting department, and 21.4% reported that their hospital did not have such a department. Of those subjects that reported a managed care contracting department, 90.9% responded that the development of the department was "moderately to very attributable" to their hospitals' participation with PPOs.

Related to the staff responsible for PPO contracting activities, subjects were asked the number of full time equivalent (FTE) employees responsible for their hospitals' managed care contracting in 19xx and in 1990. The mean, median, and mode were calculated, wherein the data indicated that the number of FTEs responsible for managed care contracting increased between 19xx and 1990 (see Table 10). For instance, hospitals, reported a mean of 0.68 FTEs responsible or managed care contracting in 19xx; however, for 1990, they reported a mean of 1.72 FTEs. When asked whether the increase in the number of FTEs responsible for managed care contracting was attributable to their

hospitals' participation with PPOs, 80% of subjects reported that it was "moderately to very attributable."

Table 10

Average Number of Full Time Equivalents (FTE) Responsible for Managed Care Contracting

	FTEs		
Year	Mean (%)	Median (%)	Mode (%)
19xx[a]	0.68	0.50	1.00
1990	1.72	1.50	1.00

[a] 19xx represented a hospital's first full calendar year of participation with PPOs. One subject did not responded for 19xx.

Integration of the PPO contracting role and other hospital departments represented the third bureaucratic OCM investigated. Concerning such integration, subjects were asked whether admitting, patient billing, finance, utilization review, and quality assurance were consulted when analyzing PPO contracts in 19xx and 1990. The data indicate that more hospitals consulted with the identified departments in the second reference year than in the first (see Table 11). Respectively, 42.9%, 78.6%, and 42.9% of the sample reported that their hospital consulted with patient billing, finance, and utilization review in 19xx for purposes of PPO contract analysis. However, 100% of subjects reported PPO consultation

Table 11

Consultation with Hospital Departments (in percentages)

Year	Yes	No	Info. not avail.[a]	Don't know
19xx[b]				
Admitting	35.7	42.9	7.1	14.3
Patient billing	42.9	42.9	7.1	7.1
Finance	78.6	7.1	7.1	7.1
Utilization review	42.9	35.7	7.1	14.3
Quality assurance	28.6	50.0	7.1	14.3
Other	35.7			
1990				
Admitting	92.9	7.1	0	0
Patient billing	100.0	0	0	0
Finance	100.0	0	0	0
Utilization review	100.0	0	0	0
Quality assurance	85.2	14.3	0	0
Other	85.2			

[a]Info. not avail. = Information not available. [b]19xx represented a hospital's first full calendar year of participation with PPOs.

with these departments in 1990. Subjects also reported an increase, from 35.7% in 19xx to 85.7% in 1990, in the degree with which they consulted with hospital departments not identified in the interview.

With respect to PPO participation analysis, subjects were also asked to report the importance of consultation between the PPO contracting role and other hospital departments in 19xx and in 1990. The data indicate that such consultation was more important to hospitals in the second reference year than in the first (see Table 12). Concerning 19xx, 35.7% of subjects reported that consultation between the PPO contracting role and other hospital departments, for the purpose of PPO participation analysis, was "moderately to very important," whereas in 1990, 92.9% of respondents reported that such consultation was "moderately to very important."

Table 12

Importance of Consultation with Hospital Departments

	Year	
Importance (in percentages)	19xx[a]	1990
Not or slightly	50.0	7.1
Moderately to very	35.7	92.9
Information not available	7.1	0
Don't know	7.1	0

[a] 19xx represented a hospital's first full calendar year of participation with PPOs.

Subjects attributed this change of importance to an increased awareness concerning the affects of PPO participation on many departments in hospitals other than that responsible for PPO negotiation, coordination, and management.

Finally, concerning the third bureaucratic OCM, subjects were asked whether their hospital had a managed care contract review committee in either 19xx or in 1990 that was responsible for analyzing participation in PPO contracts. The data indicate that the majority of sample hospitals did not have such a committee for either reference year. With respect to 19xx, 21.4% of subjects reported that their hospital had a managed care contract review committee responsible for PPO participation analysis, and for 1990, only 35.7% of subjects reported utilization of such a committee. However, of those hospitals that had a managed care contract review committee for either reference year, 71.4% reported that the committee was "moderately to very important" to their hospitals' participation with PPOs.

Transaction OCMs. The first transaction OCM studied by the investigation was the use of formal policies and procedures pertinent to PPO contracting activities. Subjects were asked whether their hospital had such policies and procedures in 19xx and in 1990. With respect to the first reference year, 28.6% of the sample reported the use of formal policies and procedures designed for PPO contracting activities, and for the second reference year, 57.1% of the sample reported the use of such policies and procedures. Subjects were also asked to explain why their hospital did, or did not use formal policies and procedures that directed participation with PPOs. With respect to the use of such policies and procedures, subjects argued the need for consistency and standardization when participating with PPOs. However, those hospitals that did not use formal policies and procedures commented that variance among PPOs required that their hospitals' be flexible in their response to PPOs.

Affiliation with an IPA for purposes of PPO contracting was the second transaction OCM investigated by the study. With respect to 19xx and 1990, subjects were asked whether their hospital was affiliated with an IPA for such purpose. Regarding the first reference year, 50% of the sample reported that their hospital was affiliated with an IPA for PPO contracting, and concerning the second year, 92.9% of the sample reported such an affiliation. When asked whether the relationship between their hospital and its affiliated IPA was attributable to contracting activities with PPOs, 71.4% of the sample reported that it was "moderately to very attributable."

Subjects also were asked whether their hospital provided support to its affiliated IPA in either 19xx, or in 1990. The types of support indicated were (a) administrative, (b) clerical, (c) financial, and (d) office space. The data indicate that hospitals provided more support to their affiliated IPA in 1990 than in 19xx (see Table 13). Respectively, for example, 7.1% and 14.3% of hospitals in the sample provided administrative or financial support to their affiliated IPA in 19xx. However, concerning 1990, such support increased to 64.3% and 50% respectively. Subjects also reported an increase, from 7.1% to 21.4%, in types of support not indicated on the survey. When asked to describe changes in the type of support given by their hospital to its affiliated IPA, subjects reported that their hospital recognized the importance of a strong hospital/physician relationship with respect to managed care contract negotiations and that IPAs offered an organized physician contracting component to such negotiations.

The inclusion of financial stop-loss provisions in PPO contracts represented the third and final transaction OCM investigate by the study. Subjects reported that such provisions were considerably more important to their hospital in 1990 than in 19xx. With respect to 19xx, 21.4% of subjects reported that financial stop-loss provisions were included in their

hospitals' contracts with PPOs. Concerning 1990, however, 100% of the hospitals in the sample included financial stop-loss provisions in their agreements with PPOs.

Table 13

Hospital Support Given to Affiliated IPAs (in percentages)[a]

Year	Yes	No	Info. not avail.[b]	Don't know
19xx[c]				
Admin./mgmt.[d]	7.1	71.4	7.1	7.1
Clerical	7.1	71.4	7.1	7.1
Financial	14.3	64.3	7.1	7.1
Office space	7.1	71.4	7.1	7.1
Other	0			
1990				
Admin./mgmt.	64.3	14.3	7.1	7.1
Clerical	50.0	28.6	7.1	7.1
Financial	50.0	28.6	7.1	7.1
Office space	42.9	35.7	7.1	7.1
Other	21.4			

[a]Only 13 subjects reported data for this questions. [b]Info. not avail. = Information not available. [c]19xx represented a hospital's first full calendar year of participation with PPOs. [d]Admin./mgmt. = Administrative/management.

Subjects were also asked whether it was important for their hospital to include financial stop-loss provisions in their agreements with PPOs in 19xx and 1990. Subjects reported that such provisions were considerably more important in 1990 than 19xx. Regarding the latter, only 7.1% of respondents reported that financial stop-loss provisions were "moderately to very important" to their hospital, whereas for 1990, 100% of the sample reported that such provisions were "moderately to very important." When asked to explain changes to the importance of financial stop-loss provisions to their hospital, subjects reported that such provisions significantly decreased the risk associate with PPO participation characterized by changing payer and payment characteristics (i.e., decreased length of hospital stays and competitive per diem discounts). Hospitals also reported that financial stop-loss provisions were developed as a result of previous financial losses associated with PPO and managed care participation.

Finally, subjects were asked to report the percentage of PPO contracts in 19xx and in 1990 that included financial stop-loss provisions. For each reference year, the mean, median, and mode were calculated, wherein the data indicated that the percentage of PPO contracts that included such provisions was greater in 1990 than in 19xx (Table 14). Regarding 19xx, for example, the mean percentage of PPO contracts including financial stop-loss provisions was 7%; however, by 1990, this number had increased to 93%. This increase represented approximately a 1200% increase in the number of PPO contracts that included financial stop-loss provisions.

Table 14

Percentage of Preferred Provider Organization (PPO) Contracts with Stop-Loss Provisions

	Percentage of PPO Contracts		
Year	Mean	Median	Mode
19xx[a]	7.0	0.0	0.0
1990	93.0	95.0	95.0

[a] 19xx represented a hospital's first full calendar year of participation with PPOs. 10 subjects responded for 19xx.

Discussion of the Results

The study's results indicate the increased prevalence and perceived importance of managed care and PPO contracts to responding hospitals. Associated with these changes, the study's findings suggest that hospitals in the sample, as a result of their participation with PPOs, have developed and experienced changes to bureaucratic and transaction OCMs. Implications of the study's results are discussed below with respect to transaction cost economics.

Williamson (1985, p. 105) has argued that transaction costs are not easily measured, but that they can be identified through governance structures designed to economize transaction costs. Consequently, this study did not attempt to measure transaction costs, but rather, it investigated ways in which hospitals governed contractual relationships with PPOs. Germane to the investigation was the presupposition that governance structures

consisted of OCMs, and that hospitals governed PPO relationships through bureaucratic and transaction OCMs. Results of the study are salient, therefore, in that they describe the development of and changes to bureaucratic and transaction OCMs, whereby hospitals economized transaction costs.

Findings associated with (a) the location of the PPO contracting role in the bureaucratic hierarchy of hospitals, (b) the staff responsible for PPO contract activities, (c) the integration of the PPO contracting role with other hospital departments, (d) the hospital affiliation with IPAs for PPO contracting purposes, and (e) the use of stop-loss provisions in PPO contracts, are of particular interest because each represents an OCM where the majority of responding hospitals reported considerable change between their first full calendar year of PPO participation and 1990. This does not imply that all hospitals in the sample have developed identical OCMs, but rather, that these are areas where hospitals have uniformly recognized their ability to economize transaction costs. Also, it is noteworthy that of these OCMs, the first three are bureaucratic OCMs, whereas the latter two are transaction OCMs. This combination supports the argument that hospitals govern contractual relationships with PPOs through bureaucratic and transaction OCMs.

A particular note is warranted concerning the use of stop-loss provisions. Although not supported by the data, there is reason to believe that the dramatic increase in their use is related to changes in the level of financial risk associated with PPO contracts in 1982 and in 1990. Whereas early PPOs contracted with hospitals on the basis of a percentage from charges discount, later PPOs have negotiated per diem and case mix reimbursement terms that are designed to put hospitals at greater financial risk for the delivery of health care services (Gabel et al., 1986). Consistent with transaction cost economics, therefore, it is probable that stop-loss provisions were not necessary when the financial risk associated

with PPOs was limited; however, as the financial risk increased, so too did the necessity for stop-loss provisions.

Concern also arises specific to the study's finding that hospitals increased the support given to their affiliated IPA between the first full calendar year of contractual participation with PPOs and 1990. The study's questionnaire, unfortunately, did not ask respondents to report whether the identified increases were attributable to PPO participation. It is difficult to determine, therefore, if the data is associated with the hospital/PPO relationship or with extraneous factors. Extraneous factors might hypothetically include (a) the full or partial ownership of a hospital by physicians in its affiliated IPA, (b) a hospital strategy to strengthen its relationship with IPA physicians, and (c) a joint strategy between a hospital and its affiliated IPA to strengthen their respective negotiating power with HMOs.

The study hypothesized that responding hospitals had developed bureaucratic and transaction OCMs to govern their contractual relationships with PPOs; it did not expect, however, that all hospitals had developed identical OCMs or identical combinations of OCMs. Despite demographic similarities among hospitals participating in the study (e.g., status as acute care hospitals, participation in PPO contracts, and affiliation with the Pacific Health Alliance), many transaction cost variables were not considered. Examples include (a) the varying degree of professional experience and knowledge specific to persons responsible for negotiating PPO contracts, (b) the different PPOs in the San Francisco Bay Area with which responding hospitals participated and the varying demographic characteristics of these PPOs, and (c) the different competitive environments associated with hospitals in the study. It is plausible, therefore, that hospitals experience different levels of transaction costs associated with PPO participation and that they govern contractual relationships and develop OCMs accordingly.

This premise provides insight to the study's mixed results concerning the development of managed care contract review committees and of formal policies and procedures specific to the governance of PPO contracts. Although the majority of responding hospitals did not utilize these OCMs, those that did considered them important to their hospitals' participation with PPOs. This apparent anomaly suggests, therefore, that hospitals utilizing these OCMs have economized transaction costs specific only to their hospitals' participation with PPOs. However, where the respective OCMs were not adopted, it can be argued that transaction costs were not such that the OCMs provided efficient contractual governance. With respect to formal policies and procedures specific to PPO participation, this argument is particularly attractive. Recall, hospitals that utilized formal policies and procedures commented on the need for consistency and standardization when negotiating with PPOs; however, hospitals that did not utilize PPO specific policies and procedures suggested the need for flexibility in their negotiations.

Limitations of the Study

Given the nature of the research methodology, specific limitations require consideration. These are discussed separately with respect to their affect on the study's findings.

1. The study's greatest limitation was its non-experimental design. As a result, it could not identify or determine a causal relationship between independent and dependent variables and was limited, therefore, to an exploration of association. Consequently, although the study indicated that the development of and changes to OCMs occurred at the same time that hospitals significantly increased their participation with PPOs, a causal relationship could not be determined. Nevertheless, the study's results appear to indicate that hospitals govern contractual relationships with PPOs through OCMs.

2. Two limitations arise as a result of the study's small sample size (14 hospitals). First, data analysis was limited to descriptive statistics. As a result, it was not possible to determine the strength of the association between PPO participation and the development of and changes to OCMs. However, given the dramatic changes between the data reported for the first full calendar year of PPO participation and 1990, a strong association is likely. Second, the small sample size does not allow the study's findings to be generalized for a larger population. It stands to reason, however, that although these specific OCMs may not be present in a larger population, the development of and changes to bureaucratic and transaction OCMs is plausible in any population where contractual participation between hospitals and PPOs is characterized by asset specificity, bounded rationality, and opportunism.

3. Also, of concern is whether subjects were able to distinguish between their hospitals' participation with PPO contracts and with managed care contracts when asked to provide information specific to PPOs. Although there is no evidence to support that such confusion occurred, the survey administrator noted numerous occasions where respondents were not clear of the distinction between managed care and PPO contracting. Questions specific to managed care contracts and PPO contracts, however, were clearly identified and both terms were defined for respondents during the initial portion of the interview.

4. The study was designed as a retrospective investigation of the relationship between hospitals and PPOs. As a result, respondents were required to report their hospitals' PPO experience with respect to the first full calendar year of participation and 1990. Because the data was collected in June of 1991, it is possible that the information provided by respondents was inaccurate. Two conditions of inaccuracy require consideration. First, it is possible that respondents did not accurately remember information specific to the study's reference years. This is of particular threat with respect to the first full calendar year of

PPO participation. Second, it is highly probable, due to the changes associated with the structure of the PPO contracting role, that respondents were not employed by their hospital for both of the study's reference years. It is likely, therefore, that the data is biased by hearsay. The study attempted to limit this bias by allowing subjects to respond that they did not know a particular answer or that the information necessary for a particular response was not available. Judging from those questions where not all hospitals provided responses, this solution appears to have been partially effective.

Despite these limitations, the study has provided valuable insight to the ways in which hospitals govern their relationships with PPOs. In particular, it has explored a number of different variables which described the development of and changes to bureaucratic and transaction OCMs.

Chapter V

Conclusion

Preferred provider organizations represent a unique form of health care delivery in the United States. This study has provided insight to the relationship between hospitals and PPOs and has suggested ways in which hospitals govern their participation with PPOs. Oliver Williamson's (1985, 1991) theories of transaction cost economics served as the theoretical framework for this study and provided a unique perspective through which to view the contractual exchange between hospitals and PPOs. In particular, transaction cost economics allowed the study to acknowledge the conditions of bounded rationality, opportunism, and asset specificity and to consider the governance implications of these conditions on the hospital/PPO relationship. Consistent with transaction cost economics, the study postulated that the exchange between hospitals and PPO was characteristic of a hybrid governance structure (i.e., between market and hierarchy), whereby environmental adaptability was achieved though bureaucratic and transaction OCMs. A questionnaire was administered to 14 hospitals in the San Francisco Bay Area, wherein the data described the development of and changes to bureaucratic and transaction OCMs specific to hospital participation with PPOs.

This study is unique in that it provides a perspective of the relationship between hospitals and PPOs that, heretofore, has not been considered. Whereas hospital participation with PPOs has been presented as a problem of discounted rates and adherence to utilization review procedures, in exchange for increased market share (American Association of Preferred Provider Organizations, 1988; de Lissovoy et al., 1986; Gabel et al., 1986; Palmer, 1985), this study has suggested that hospital participation with PPOs is also a problem of transaction cost economics. The following implications, therefore, are noteworthy.

Relatively experimental, PPOs represent difficult decisions for hospitals. It is imperative, therefore, that hospitals develop an understanding of their relationship with PPOs. This study indicates that PPO participation requires significant commitment from hospitals beyond negotiating price discounts and adhering to PPO sponsored utilization review. Germane to this commitment is the recognition of bounded rationality, opportunism, and asset specificity. These are the conditions of transaction cost economics, and the manner by which they are governed is crucial to a comprehensive understanding of the hospital/PPO relationship.

Further, this study suggests new avenues of investigation for health policy researchers. Whereas Williamson (1985) posits that transactions are the building block of economic organization, transaction cost economics offers the potential for considerable insight to the health care arena and particularly, to the delivery of health care services. This study has investigated one component of the hospital/PPO relationship. Further research is necessary, therefore, with respect to the influence of transaction cost economics on other pieces of the model. Also, analysis of transaction cost economics is likely to be beneficial in the analysis of HMOs, exclusive provider organizations (EPO), and perhaps most importantly, nationalized health care. As a comparative model of economic organization, transaction cost economics provides researchers with an alternative means of describing and analyzing the economic and organizational structure of health services delivery.

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Appendix A

Sample Letter Corresponding to Step 1 of the Methodology

Date

Hospital
Name
Title
Address
City, State Zip

Dear Hospital PPO Contractor:

As you may be aware, in addition to my work with the Pacific Health Alliance, I am studying at San Jose State University for the degree Master of Public Health. In partial fulfillment of this degree, I am conducting a study, for presentation as a thesis, which investigates the effects of PPO participation on the organizational structure of hospitals in the San Francisco Bay Area. Despite the many implications this topic poses concerning the ability of PPOs to effectively manage medical costs, it has received little attention in the current body of health policy and administration research.

The study is designed as an exploratory investigation of the ways in which hospitals manage their relationships with PPOs and will focus on two primary questions.

1) Do hospitals experience changes in their organizational structure as a result of PPO participation?

2) Do hospitals develop organizational control mechanisms through which PPO participation can be managed against unforeseen "hazards"?

In order to gain insight to these questions, I have developed a survey instrument which explores salient features of the hospital/PPO relationship. I will be interviewing individuals within PHA hospitals who are responsible for PPO contract management during the week of (Date), and I would appreciate the opportunity to include you in my study. Completion of the questionnaire will take no more than 20-30 minutes. As a follow-up to this letter, I will be calling you within the next two weeks to discuss your participation in this study and perhaps schedule a time for an interview.

Please be aware that the decision to participate in this study in no way affects your relationship with the Pacific Health Alliance or its contracted payers. Also, results will remain confidential to the study and will only be reported as aggregate data and will not identify individual respondents or their hospitals. All study participants will receive a copy of the completed study.

This study has been reviewed by Dr. Lawrence Cappel, and it is upon his approval that I am requesting your participation. You may direct any questions or concerns to myself or Dr. Cappel at the PHA offices, or to Dr. Laura Gardner of the Department of Health Science at San Jose State University.

Thank you for your attention to this request. I look forward to speaking with you in the near future.

Sincerely,

William B. Graham
Director, Contracting and Managed Care Services

cc: Lawrence W. Cappel, Ph.D.
Laura B. Gardner, M.D., M.P.H.

Sample Letter Corresponding to Step 3 of the Methodology

Date

Hospital
Name
Title
Address
City, State Zip

Dear Hospital PPO Contractor:

It was a pleasure speaking with you concerning my PPO study; I look forward to your participation. Below, I have indicated the date and time to which you have agreed to participate.

DATE:

TIME:

As discussed, I will not be administering the actual survey. On the specified date and time, you can expect a call from _____.

For your convenience, I have enclosed a draft copy of my questionnaire. This provides you with the questions and flow of the instrument. As this study is exploratory, close-ended questions will be followed by an opportunity to briefly explain your response.

I wish to confirm that the results of this study shall remain confidential and will be presented only as aggregate date.

I am expecting to complete my analysis of the data later this year and will provide you with a copy of the study results. Please direct any questions or concerns regarding this study to myself or Dr. Lawrence Cappel at the PHA offices, or to Dr. Laura Gardner of the San Jose State University Department of Health Science.

Again, thank you for your assistance; I look forward to the findings generated from your participation.

Sincerely,

William B. Graham
Director, Contracting and Managed Care Services

cc: Lawrence W. Cappel, Ph.D.
Laura Gardner, M.D., M.P.H.

Questions Included on the Survey Instrument

1) Are you the person in your hospital most responsible for PPO contracting?

2) What is your employment title?

3) Does your hospital participate in managed care contracts with third-party payers?

3a) How many managed care contracts did your hospital have in 1985 and in 1990?

3b) In the opinion of your hospital's administrator/chief executive officer (CEO), how important was managed care contracting to your hospital in 1985 and in 1990?

4) What percentage of your hospital's patient mix was from HMOs in 1985 and in 1990?

QUESTIONS 5 THROUGH 13 WILL SEEK INFORMATION ON YOUR HOSPITAL'S PPO EXPERIENCE DURING THE FIRST FULL YEAR IN WHICH IT PARTICIPATED WITH PPOS AND DURING 1990.

5) Does your hospital participate with preferred provider organizations (PPO)?

5a) What was the first full calendar year that your hospital participated with PPOs?

5b) How many PPO contracts did your hospital have in its first full year of PPO participation and in 1990?

5c) In the opinion of your hospital's administrator/CEO, how important was PPO contracting to your hospital?

6) What percentage of your hospital's patient mix was from PPOs?

7) What was the employment title of the person in your hospital most responsible for PPO contracting?

8) What was the employment title in your hospital of the individual to whom the person responsible for PPO contracting reported?

9) Did your hospital have a managed care contracting department?

9a) To what degree was the development of a managed care contracting department attributable to your hospital's participation with PPOs?

9b) How many full time equivalent (FTE) employees had responsibility for managed care contracting activities?

9b1) To what degree was the increased number of FTEs responsible for managed care contracting attributable to your hospital's participation with PPOs?

10) When analyzing PPO contracts, were the following hospital departments consulted?

Admitting Pat. Billing Finance Util. Review Qual. Assur.

10a) How important was it to consult with other hospital departments when analyzing PPO contracts?

10b) Did your hospital have a managed care contract review committee?

10b1) To what degree was the development of a managed care contract review committee attributable to your hospital's participation with PPOs?

11) Did your hospital use formal contracting policies and procedures when analyzing participation in PPO contracts?

12) Was there an independent physicians association (IPA) affiliated with your hospital that participated in PPO contracting?

12a) To what degree was the relationship between your hospital and its affiliated IPA attributable to contracting activities with PPOs?

12b) Please indicate any support given by your hospital to its affiliated IPA.

Administrative Clerical Financial Office Space

13) When contracting with PPOs, did your hospital include financial stop-loss provisions in its reimbursement terms?

13a) How important was it to your hospital that financial stop-loss provisions be included in its reimbursement terms with contracted PPOs?

13b) What percentage of your hospital's PPO contracts included a financial stop-loss provision in their reimbursement terms?

SAMPLE CHOICES FOR SCALED QUESTIONS:

NOT AT ALL OR SLIGHTLY ... _____
MODERATELY TO VERY... _____
INFORMATION NOT AVAILABLE _____
DON'T KNOW _____

Sample Letter Corresponding to Step 5 of the Methodology

Date

Hospital
Name
Title
Address
City, State Zip

Dear Hospital PPO Contractor:

I would like to take this opportunity to thank you for your recent participation in my study investigating the relationship between hospitals and preferred provider organizations. The preliminary findings look very interesting.

As indicated previously, I expect to complete my thesis towards the end of this year and will provide you with a copy of my results at that time.

Again, thank you for your participation. If you have any questions or concerns regarding this study and the use of its results, please feel free to call myself or Dr. Lawrence Cappel at the Pacific Health Alliance, or Dr. Laura Gardner of the San Jose State University Department of Health Science.

Sincerely,

William B. Graham
Director, Contracting and Managed
Care Services

cc: Lawrence W. Cappel, Ph.D.
Laura B. Gardner, M.D., M.P.H.

Appendix B

Statement of Informed Consent

This study is designed to investigate the effects of participation with preferred provider organizations on the organizational development of hospitals. The results of this research will assist in understanding the complex relationships between health care providers and third-party payers. During this interview, I will ask you questions regarding your hospital's experience with PPOs and how this experience has shaped the ways in which your hospital participates with such organizations. The survey will take approximately 20-30 minutes of your time.

Please understand that your participation in this study is voluntary and that you may cease the interview at any time. Also, information that could be identified with you will remain anonymous and will only be disclosed as required by law.

If you have any questions or concerns regarding your participation in this study, please feel free to contact William Graham at (XXX) XXX-XXXX or Dr. Laura Gardner of the San Jose State University Department of Health Science at (XXX) XXX-XXXX.

Appendix C

PPOs: Hospital Participation in the San Francisco Bay Area
Survey Instrument -- Hospital Assessment of PPO Participation

Demographics

1) Are you the person in your hospital most responsible for PPO contracting?

YES NO

(If no, determine who is most responsible for PPO contracting and see if it is possible to interview this person.)

2) What is your employment title? _____

3) Does your hospital participate in managed care contracts with third-party payers?

By managed care contracts, I mean contractual agreements with third-party payers where the hospital agrees to participate in cost control measures. Examples include: HMOs, PPOs, insurance companies, Medicare, Medi-Cal, or employers.

YES NO

3a) How many managed care contracts did your hospital have:

1985: _____ Info. not Avail. _____ Don't Know _____
1990: _____ Info. not Avail. _____ Don't Know _____

3b) In the opinion of your hospital's administrator/chief executive officer (CEO), how important was managed care contracting to your hospital:

1985: Not at All or Slightly Important _____
Moderately to Very Important _____
Information not Available _____
Don't Know _____

1990: Not at All or Slightly Important _____
Moderately to Very Important _____
Information not Available _____
Don't Know _____

(If 1985 different than 1990, ask question 3b1. If not, continue with question 4.)

3b1) Please explain the change in importance of managed care contracting to your administrator/CEO between 1985 and 1990:

_____
_____
_____

4) What percentage of your hospital's patient mix was from HMOs?

1985: _____ Info. not Avail. _____ Don't Know _____
1990: _____ Info. not Avail. _____ Don't Know _____

5) Does your hospital participate with preferred provider organizations (PPO)?

By PPO, I mean contractual relationships between the hospital and third-party payers where the relationship is characterized by: (a) a negotiated fee-for-service discount; (b) financial incentives encouraging, but not requiring covered persons to utilize contracted providers; and (c) utilization review requirements.

YES NO (If no, terminate the interview.)

5a) What was the first full calendar year that your hospital participated with PPOs?

Year: _____

(Use this figure for 19xx. If respondents do not know the first full calendar year of their hospital's PPO contracting, use 1987 for 19xx.)

5b) How many PPO contracts did your hospital have:

19xx: _____ Info. not Avail. _____ Don't Know _____
1990: _____ Info. not Avail. _____ Don't Know _____

5c) In the opinion of your hospital's administrator/CEO, how important was PPO contracting to your hospital:

19xx: Not at All or Slightly Important _____
Moderately to Very Important _____
Information not Available _____
Don't Know _____

1990: Not at All or Slightly Important _____
Moderately to Very Important _____
Information not Available _____
Don't Know _____

(If 19xx different that 1990, ask question 5c1. If not, continue with question 6.)

5c1) Please explain the change in importance of PPO contracting to your administrator/CEO between 19xx and 1990:

_____
_____
_____
_____

6) What percentage of your hospital's patient mix was from PPOs:

19xx: _____ Info. not Avail. _____ Don't Know _____
1990: _____ Info. not Avail. _____ Don't Know _____

Bureaucratic Organizational Control Mechanisms

7) What was the employment title of the person in your hospital most responsible for PPO contracting:

19xx: _____

Info. not Available _____ Don't Know _____

1990: _____

Info. not Available _____ Don't Know _____

(If 19xx different than 1990, ask question 7a. If not, continue with question 8.)

7a) If the employment title of the person in your hospital most responsible for PPO contracting changed, please explain why the change occurred and if it represented a change in the hospital's bureaucratic hierarchy:

_____
_____
_____
_____

8) What was the employment title in your hospital of the individual to whom the person most responsible for PPO contracting reported:

19xx: _____

Info. not Available _____ Don't Know _____

1990: _____

Info. not Available _____ Don't Know _____

(If 19xx different that 1990, ask question 8a. If not, continue with question 9.)

8a) If the employment title of the individual to whom the person most responsible for PPO contracting reported changed, please explain why this change occurred and if it represented a change in the hospital's bureaucratic hierarchy:

_____
_____
_____
_____

9) Did your hospital have a managed care contracting department:

By managed care contracting department, I mean an organizational department responsible for negotiating, coordinating, and managing contracts with managed care payers.

19xx: YES NO Info. not Avail. _____ Don't Know _____
1990: YES NO Info. not Avail. _____ Don't Know _____

(If yes for either year, ask question 9a. If other answers, continue with question 9b.)

9a) To what degree was the development of a managed care contracting department attributable to your hospital's participation with PPOs:

Not at All or Slightly Attributable _____
Moderately to Very Attributable _____
Information not Available _____
Don't Know _____

9b) How many full time equivalent (FTE) employees had responsibility for managed care contracting activities:

19xx: _____ Info. not Avail. _____ Don't Know _____
1990: _____ Info. not Avail. _____ Don't Know _____

(If 1990 greater than 19xx, ask question 9b1. If 1990 less than 19xx, ask question 9b2. All other answers, go to 10.)

9b1) To what degree was the increased number of FTEs responsible for managed care contracting attributable to your hospital's participation with PPOs:

Not at All or Slightly Attributable _____
Moderately to Very Attributable _____
Information not Available _____
Don't Know _____

(Go to question 10.)

9b2) Please explain the decrease in the number of FTEs responsible for managed care contracting:

_____
_____
_____
_____

10) When analyzing PPO contracts, were the following hospital departments consulted:

19xx:

Admitting:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Pat. Billing:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Finance:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Util. Review:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Qual. Assur.:	YES	NO	Info. not Avail.	_____	Don't Know	_____

Other:

Please List: _____

_____

_____

1990:

Admitting:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Pat. Billing:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Finance:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Util. Review:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Qual. Assur.:	YES	NO	Info. not Avail.	_____	Don't Know	_____

Other:

Please List: _____

_____

_____

(If other departments were not considered in 19xx or 1990, continue with question 10b.)

10a) How important was it to consult with other hospital departments when analyzing PPO contracts:

19xx:

Not at All or Slightly Important	_____
Moderately to Very Important	_____
Information not Available	_____
Don't Know	_____

1990:

Not at All or Slightly Important	_____
Moderately to Very Important	_____
Information not Available	_____
Don't Know	_____

(If 19xx different than 1990, ask question 10a1. If not, continue with question 10b).

10a1) Please explain any changes in the importance of consulting with other hospital departments when analyzing PPO contracts:

_____

_____

_____

_____

10b) Did your hospital have a managed care contract review committee:

By managed care contract review committee, I mean a committee of hospital employees responsible for reviewing hospital participation in managed care contracts.

19xx: YES NO Info. not Avail. _____ Don't Know _____
1990: YES NO Info. not Avail. _____ Don't Know _____

(If yes or either year, ask question 10b1. If other answers, continue with question 11.)

10b1) To what degree was the development of a managed care contract review committee attributable to your hospital's participation with PPOs:

Not at All or Slightly Attributable _____
Moderately to Very Attributable _____
Information not Available _____
Don't Know _____

Transaction Organizational Control Mechanisms

11) Did your hospital use formal contracting policies and procedures when analyzing participation in PPO contracts:

By formal, I mean written or expressed policies and procedures established by the hospital which direct participation with PPOs.

19xx: YES NO Info. not Avail. _____ Don't Know _____
1990: YES NO Info. not Avail. _____ Don't Know _____

11a) Please explain why your hospital did or did not use formal contracting policies and procedures for PPO contracting:

_____
_____
_____
_____

12) Was there an independent physicians association (IPA) affiliated with your hospital that participated in PPO contracting:

By IPA, I mean an organized group of independent physicians on staff with your hospital that have agreed to participate in managed care contracts in conjunction with the hospital.

19xx: YES NO Info. not Avail. _____ Don't Know _____
1990: YES NO Info. not Avail. _____ Don't Know _____

(If yes for 19xx or 1990, ask question 12a. If other answers, continue with question 13.)

12a) To what degree was the relationship between your hospital and its affiliated IPA attributable to contracting activities with PPOs:

Not at All or Slightly Attributable _____
Moderately to Very Attributable _____
Information not Available _____
Don't Know _____

12b) Please indicate any support given by your hospital to its affiliated IPA:

19xx:

Admin.:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Clerical:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Financial:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Office Space:	YES	NO	Info. not Avail.	_____	Don't Know	_____

Other:
Please List: _____
_____
_____
_____

1990:

Admin.:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Clerical:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Financial:	YES	NO	Info. not Avail.	_____	Don't Know	_____
Office Space:	YES	NO	Info. not Avail.	_____	Don't Know	_____

Other:
Please List: _____
_____
_____
_____

12b1) Please explain any changes in the types of support given to your hospital's affiliated IPA for PPO contracting:

_____
_____
_____
_____

13) When contracting with PPOs, did your hospital include financial stop-loss provisions in its reimbursement terms:

By financial stop-loss provisions, I mean per case contractual conditions designed to supersede negotiated reimbursement terms in the event of unforeseen circumstances where your hospital is threatened with significant financial losses.

19xx:	YES	NO	Info. not Avail.	_____	Don't Know	_____
1990:	YES	NO	Info. not Avail.	_____	Don't Know	_____

(If yes for 19xx or 1990, ask question 13a. If other answers, survey completed.)

13a) How important was it to your hospital that financial stop-loss provisions be included in its reimbursement terms with contracted PPOs:

19xx: Not at All or Slightly Important _____
Moderately to Very Important _____
Information not Available _____
Don't Know _____

1990: Not at All or Slightly Important _____
Moderately to Very Important _____
Information not Available _____
Don't Know _____

(If 1990 different than 19xx, ask question 13a1. If no difference, go to 13b.)

13a1) Please explain changes to the importance of financial stop-loss reimbursement provisions with respect to participation with PPOs:

_____
_____
_____
_____

13b) What percentage of your hospital's PPO contracts included a financial stop-loss provision in their reimbursement terms:

19xx: _____ Info. not Avail. _____ Don't Know _____
1990: _____ Info. not Avail. _____ Don't Know _____

(If 1990 is less than 19xx, ask question 13b1. If not, survey completed.)

13b1) Please explain why a greater percentage of PPO contracts included financial stop-loss provisions in 19xx than in 1990:

_____
_____
_____
_____

Survey Completed

Appendix D

Explanation of Survey Questions

The questionnaire consisted of three sections which included (a) demographics, (b) bureaucratic OCMs, and (c) transaction OCMs. Each section is discussed separately below in conjunction with its corresponding questions.

Demographics. The first section of the questionnaire was intended to verify that responding hospitals participated with PPOs and that subjects were responsible for negotiating, coordinating, and managing PPO contracts. It also investigated the number of managed care and PPO contracts with which responding hospitals participated and explored the perceived importance of such relationships. Questions corresponding to this section of the survey instrument are presented and discussed below with respect to their numerical order of appearance.

1. Are you the person in your hospital most responsible for PPO contracting? This was a screening question designed to verify that subjects were responsible for their hospital's contracting activities with PPOs. If the subject was not responsible for such activities, the survey administrator was instructed to identify the person to whom such organizational responsibilities were assigned and determine if that individual would participate in the study. In the event that the person with whom initial contact was made was not the individual responsible for PPO contracting, but was designated by that individual to participate in the study, the survey administrator was instructed to continue with the interview.

2. What is your employment title? This question was designed to document the employment title of each respondent and was included in the survey to verify that subjects were responsible for their hospital's PPO contracting activities.

3. Does your hospital participate in managed care contracts with third-party payers? Managed care contracts were defined for respondents as contractual agreements with third-party payers where the hospital agreed to participate in cost control measures. This was a screening question and subjects were asked to respond either "yes" their hospital participated in such contracts, or "no" it did not.

3a. How many managed care contracts did your hospital have in 1985 and in 1990? The question was designed to determine the number of managed care contracts with which responding hospitals participated in 1985 and in 1990 and determine whether this number increased or decreased between the two reference years (see Footnote 12).

3b. In the opinion of your hospital's administrator/chief executive officer (CEO), how important was managed care contracting to your hospital in 1985 and in 1990? The question was included to identify changes in the importance of managed care contracting to responding hospitals between 1985 and 1990. Subjects were asked to respond from the perspective of their hospital's administrator/CEO in order to decrease over-reporting by persons responsible for managed care contracting activities. For both years, subjects were asked to respond either that such contracting was "not at all or slightly important" to the hospital, or "moderately to very important."

3b1. Please explain the change in importance of managed care contracting to your hospital administrator/CEO between 1985 and 1990. This question was asked of those respondents reporting changes in question (3b) and was intended to provide subjects with an opportunity to interpret such changes.

4. What percentage of your hospital's patient mix was from HMOs in 1985 and in 1990? This question was intended to determine whether hospitals experienced an increase or a decrease in their patient mix attributed to HMOs between 1985 and 1990.

5. Does your hospital participate with preferred provider organizations (PPO)? PPOs were defined for respondents as contractual relationships between the hospital and third-party payers where the relationship was characterized by: (a) a negotiated fee-for-service discount; (b) financial incentives encouraging, but not requiring covered persons to utilize contracted providers; and (c) utilization review requirements (Palmer, 1985). This was a screening question and subjects were asked to respond either "yes" their hospital participated in such contracts, or "no" it did not. The survey administrator was instructed to terminate those interviews where hospitals did not contract with PPOs as the remainder of the questionnaire was PPO specific.

5a. What was the first full calendar year that your hospital participated with PPOs? For each respondent, this figure represented the first reference year of hospital participation with PPOs. The first full calendar year of PPO participation is hereinafter referred to as 19xx.

5b. How many PPO contracts did your hospital have in 19xx and in 1990? The question was designed to determine whether the number of PPO contracts reported by hospitals increased or decreased between the two reference years.

5c. In the opinion of your hospital's administrator/CEO, how important was PPO contracting to your hospital in 19xx and in 1990? The question was designed to identify changes in the importance of PPO contracting to hospitals participating in the study between 19xx and 1990. Subjects were asked to respond from the perspective of their hospital's administrator/CEO in order to decrease over-reporting by persons responsible for PPO contracting activities. For both years, subjects were asked to respond either that such contracting was "not at all or slightly important" to the hospital, or "moderately to very important."

5c1. Please explain the change in importance of PPO contracting to your administrator/CEO between 19xx and 1990. This question was asked of those respondents reporting changes in question (5c) and was intended to provide subjects with an opportunity to interpret such changes.

6. What percentage of your hospital's patient mix was from PPOs in 19xx and in 1990? This question was intended to identify the patient mix of responding hospitals attributable to PPO contracting and determine whether this number had increased or decreased between 19xx and 1990.

Bureaucratic OCMs. This section of the questionnaire was designed to investigate the study's first working hypothesis and explore the development of and changes to bureaucratic OCMs pertinent to the hospital/PPO relationship. Questions addressed (a) the position of the PPO contracting role in the hospital's bureaucratic hierarchy, (b) the staff responsible for PPO contracting activities, and (c) the degree of integration between the PPO contracting role and other hospital departments. Questions corresponding to this section of the survey instrument are discussed below with respect to their numerical order of appearance.

7. What was the employment title of the person in your hospital most responsible for PPO contracting in 19xx and in 1990? This question was designed to identify whether the employment title of persons responsible for PPO contracting were different in 19xx than in 1990. This question was open-ended in order to capture variation in the employment titles of persons responsible for PPO contracting.

7a. If the employment title of the person in your hospital most responsible for PPO contracting changed, please explain why the change occurred and if it represented a change in the hospital's bureaucratic hierarchy. This was an open-ended question designed to

investigate changes reported in question (7) and to identify whether respondents considered such changes representative of changes in their hospital's bureaucratic hierarchy.

8. What was the employment title in your hospital of the individual to whom the person responsible for PPO contracting reported in 19xx and in 1990? This question was designed to identify whether the employment title of the individual to whom persons responsible for PPO contracting reported were different in 19xx than in 1990. This question was open-ended in order to capture variation in the requested employment titles.

8a. If the employment title of the individual to whom the person responsible for PPO contracting reported changed, please explain why this change occurred and if it represented a change in the hospital's bureaucratic hierarchy. This was an open-ended question designed to investigate changes reported in question (8) and identify whether respondents considered such changes representative of changes in their hospital's bureaucratic hierarchy.

9. Did your hospital have a managed care contracting department in 19xx and in 1990? The term manage care contracting department was defined as an organizational department responsible for negotiating, coordinating, and managing contracts with managed care payers. This was a screening question and subjects were asked to respond either "yes", or "no" with respect to the use of a managed care contracting department.

9a. To what degree was the development of a managed care contracting department attributable to your hospital's participation with PPOs? This question was asked of hospitals that reported the development of a managed care contracting department in either 19xx or 1990, and it was intended to determine whether respondents attributed the development of such a department to their hospital's participation with PPOs. The question was closed-ended and subjects were asked to respond either that the development of a

managed care contract review committee was "not at all or slightly attributable" to PPO contracting, or that it was "moderately to very attributable."

9b. How many full time equivalent (FTE) employees had responsibility for managed care contracting activities in 19xx and in 1990? This was a screening question designed to identify whether participating hospitals experienced an increase or decrease in the number of FTEs responsible for PPO contracting between 19xx and 1990.

9b1. To what degree was the increased number of FTEs responsible for managed care contracting attributable to your hospital's participation with PPOs? This question was asked of those subjects that reported an increase in the number of FTEs responsible for managed care contracting between 19xx and 1990. Respondents were asked to report either that such an increase was "not at all or slightly attributable" to PPO contracting or that it was "moderately to very attributable."

9b2. Please explain the decrease in the number of FTEs responsible for managed care contracting. This question was asked of those subjects that reported a decrease in the number of FTEs responsible for managed care contracting between 19xx and 1990. The question was open-ended and was intended to provide subjects with an opportunity to interpret the reported decrease.

10. When analyzing PPO contracts, were the following hospital departments consulted in 19xx and in 1990: admitting, finance, patient billing, utilization review, and quality assurance? This was a screening question and subjects were asked to respond either "yes", or "no" with respect to each listed department. An "other" category was also included for each year so that respondents could indicate departments that were consulted, but not listed on the questionnaire.

10a. How important was it to consult with other hospital departments when analyzing PPO contracts in 19xx and in 1990? This question was asked of subjects that reported

"yes" to one or more of the departments identified in question (10). Respondents were given the option of responding that such consultation was "not at all of slightly important" or "moderately to very important."

10a1. Please explain any changes in the importance of consulting with other departments when analyzing PPO contracts. This question was asked of those subjects that reported change with respect to consultation with hospital departments between 19xx and 1990. The question was open-ended and was intended to provide subjects with an opportunity to interpret their reported changes.

10b. Did your hospital have a managed care contract review committee in 19xx and in 1990? The term managed care contract review committee was defined as a committee of hospital employees responsible for reviewing hospital participation in managed care contracts. This was a screening question and subjects were asked to respond either "yes", or "no" with respect to the use of a managed care contract review committee.

10b1. To what degree was the development of a managed care contract review committee attributable to your hospital's participation with PPOs? This question was asked of those subjects that reported "yes" for either year in question (10b) and was designed to determine whether respondents attributed such committees to hospital participation with PPOs. Respondents were asked to respond "not at all or slightly attributable," or "moderately to very attributable."

Transaction OCMs. This section of the questionnaire was designed to investigate the study's second working hypothesis and explore the development of and changes to transaction OCMs pertinent to the hospital/PPO relationship. Questions addressed (a) formal policies and procedures designed by hospitals for their participation with PPOs, (b) hospital affiliation with IPAs, and (c) stop-loss provisions through which hospitals protected themselves from financial risks associated with PPO contracts. Questions

corresponding to this section of the survey instrument are discussed below with respect to their numerical order of appearance.

11. Did your hospital use formal contracting policies and procedures when analyzing participation in PPO contracts in 19xx and in 1990? The term formal contracting policies and procedures was defined as written or expressed policies and procedures established to direct participation with PPOs. This was a screening question and subjects were asked to respond either "yes", or "no" with respect to the use of such policies and procedures.

11a. Please explain why your hospital did or did not use formal contracting policies and procedures for PPO contracting. This question was intended to provide subjects with an opportunity to interpret their response to question (11). It was open-ended and asked of all respondents.

12. Was there an independent physicians association (IPA) affiliated with your hospital that participated in PPO contracting in 19xx and in 1990? The term IPA was defined as an organized group of independent physicians on staff with their hospital that had agreed to participate in managed care contracts with the hospital. This was a screening question, and subjects were asked to respond either "yes", or "no" with respect to their hospitals' affiliation with IPAs for PPO contracting purposes. Questions (12a), (12b), and (12b1) were asked only of those respondents that reported "yes."

12a. To what degree was the relationship between your hospital and its affiliated IPA attributable to contracting activates with PPOs? Subjects were asked to respond that their hospitals' affiliation with IPAs was "not at all or slightly attributable" to PPO contracting, or "moderately to very attributable."

12b. Please indicate any support given by your hospital to its affiliated IPA in 19xx and in 1990: administrative, clerical, financial, office space, and other. Respondents were

asked to respond either "yes", or "no" to the types of support listed. Subjects responding "other" were asked to indicate the types of support given.

12b1. Please explain any changes in the types of support given to your hospital's affiliated IPA for PPO contracting. Open-ended, this question provided respondents with an opportunity to explain changes in the types of support given to their affiliated IPA and to discuss such changes.

13. When contracting with PPOs, did your hospital include financial stop-loss provisions in its reimbursement terms in 19xx and in 1900? The term financial stop-loss provision was defined as per case contractual conditions designed to supersede negotiated reimbursement terms in the even of unforeseen circumstances where hospitals were threatened with significant financial loss. Hospitals responding "yes" were asked to continue with question (13a) and those responding "no" were informed that the survey was completed.

13a. How important was it to your hospital that financial stop-loss provisions be included in its reimbursement terms with contracted PPOs in 19xx and in 1990? For each year, respondents were asked to respond either that financial stop-loss provisions were "not at all or slightly important" or "moderately to very important" with respect to PPO contracting.

13a1. Please explain changes to the importance of financial stop-loss reimbursement provisions with respect to PPOs. Open-ended, this question was asked of those hospitals responding "yes" for either year in question (13a) and was designed to provide respondents with an opportunity to interpret and discuss changes in the importance of financial stop-loss provisions to their hospitals'.

13b. What percentage of your hospital's PPO contracts included a financial stop-loss provision in their reimbursement terms in 19xx and in 1990? The question was open-

ended. Hospitals reporting an increase in the percentage of PPO contracts with financial stop-loss provisions were informed that the interview was completed. Hospitals reporting a decrease were asked question (13b1). This question and question (13b1) were added to the questionnaire after the study's pretest in order to provide greater insight to the importance of financial stop-loss provisions to hospitals

13b1. Please explain why a greater percentage of PPO contracts included financial stop-loss provisions in 19xx than in 1990. Open-ended, this question was asked of those subjects that reported a decrease in the percentage of PPO contracts that included financial stop-loss provisions and was intended to provided respondents with an opportunity to interpret and discuss their response.

Footnotes

[1]The San Francisco Bay Area is defined according to the following geographic boundaries: Alameda County, Contra Costa County, San Francisco County, San Mateo County, Santa Clara County, and Western Solano County.

[2]Sources reporting the number of California PPOs rely on self-reported figures obtained from yearly surveys. It is not uncommon, therefore, that figures differ among reporting agencies. With respect to the number of PPOs in California, however, all sources report significant increases.

[3]PPO benefit plans are designed so that insureds have the option of using preferred or non-preferred providers; however, financial incentives are included in such plans to encourage utilization of preferred providers (American Association of Preferred Provider Organizations, 1988).

[4]The term organizational governance is used in this instance to identify the process whereby hospitals negotiate, coordinate, and manage PPO contracts.

[5]De Lissovoy et al. (1986) attribute this quotation to Max Fine, former executive director of the American Association of Preferred Provider Organizations.

[6]Boland (1988) offers the following as shared characteristics among PPOs: sponsorship, risk sharing, payment method, financial incentives and disincentives, utilization review components, utilization review organization, quality assurance program, provider network, provider membership criteria, choice of providers, benefits coverage, service area, organizational structure, administrative services, information management.

[7]Kenneth Arrow (in Williamson, 1985, p. 18) defines transactions costs as "the costs of running the economic system."

[8]Gardner (1991) defines physician discretionary behavior as "the particular treatment modalities that a physician selects in situations where there is uncertainty as to the most appropriate treatment course."

[9]Conrad et al. (1988) defined vertical integration as "the incorporation , within the boundaries of a single organization, of functions that either precede or follow the organization's 'core' technology, or both."

[10]Pretest subjects were informed that their participation in the study was only for informational purposes and that data generated from their responses would not be included in the study's reported findings.

[11]PHA represented 17 hospitals in the San Francisco Bay Area at the time of the study; however, one did not participate as a result of its participation in the study's pretest.

[12]Managed care contracts were defined as relationships with a variety of managed care entities (e.g., HMO, PPOs, Medicare, Medi-Cal, and direct employers); consequently, it was not appropriate to ask subjects to respond for their hospitals' first full calendar year of managed care contract participation. With respect to hospital participation in managed care contracts, the study's reference years were 1985 and 1990.